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My Visit to the Argentine.*

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In April, 1928, I went to the Argentine, at the request of the Argentine Government, to advise them in regard to animal contagious disease, but particularly in regard to foot-and-mouth disease. I spent a period of nearly five months in that country, arriving back in England in October.

Almost as soon as one gets on a Buenos Aires ship at Southampton one encounters something of an Argentine atmosphere, for one quickly comes in contact with passengers connected in one way or another with farming and animal industry in that land. Long before arriving at Buenos Aires I had at least a superficial knowledge of some of the difficulties in connection with animal contagious diseases in the country I was visiting. The voyage itself is to be commended to those in search of a delightful sea journey with many enjoyments and a minimum of discomforts, for even the equator can be cool at certain times, but it must not be forgotten in voyaging south at that time of year that, after crossing the line, one is travelling into commencing winter with its low temperature, diminishing sunlight, short evenings, and grey skies. The undertaking meant, in fact, experiencing three winters in succession.

On arrival at Buenos Aires I was given an office in the palatial building of the Ministry of Agriculture, and treated with every possible kindness and courtesy. The Argentine official is certainly not lacking in knowledge of how to treat official guests.

I commenced work at once. My plans were to make, first, a study of all the frigorificos or packing-houses and their methods, observing the various diseases found in the cattle arriving there for slaughter. Then I planned to visit various markets in the country; and after that to visit estancias, large and small, in all the provinces where cattle breeding on a large scale is carried on, in order to make observations on diseases on the spot. I proposed also to use every opportunity in travelling about the country to study the methods of transport of animals by rivers, railways and roads, and finally to inspect some of the ships engaged in the chilled and frozen meat industry, and observe their methods of handling this cargo.

I have heard it said and have seen it in print that official visitors to South American countries are shewn only those things that they are intended to see. That might be so in the case of laymen visiting the country for a period of days, but nothing could be further from the truth in the case of my visit. At the Embassy in London before leaving I was asked to go without introductions from the Embassy so as to leave me quite free to form my own plans. At the Ministry of Agriculture in Buenos Aires I was specifically asked to form my own plans, and not expect them to be made for me, as they wished me to conduct a free and independent inquiry and reach my own conclusions, and it is true to say that, though every help was given me when I asked for it, and all information placed at my disposal when asked for, not once was any suggestion made to me as to how I should conduct my inquiry.

The Country.

From the map, the immense size of the country will be seen. It is divided into provinces, and Buenos Aires province alone is as large as England. In a country extending over such a range of latitude the climate is very varied, from sub-tropical in the north to extreme cold at the south in Patagonia. Vegetation and diseases are as varied as the climate. Palm trees flourish in the northern provinces. The northern half of the country possesses a tick of a genus which could not live in Britain, and piroplasmosis and anaplasmosis are rife. In the southern half there are neither ticks nor tick fever. Of course the climate of the littoral provinces differs very much from that of the Andine provinces. As one proceeds westwards from the coast rainfall becomes less and less. There is no lack of rain in all the provinces near the River Plate, the cattle breeding provinces of Buenos Aires, Santa Fé, and Entre Rios; and here alfalfa (lucerne) flourishes.

The cattle-breeding provinces mentioned are the finest bits of agricultural country I have seen outside the British Empire. Buenos Aires province is the best. It is alluvial soil of almost unlimited depth, without a stone, absolutely flat, and anything in the way of stock, crops and trees will grow in the shortest possible time. A thick willow stick, for example, planted in the soil becomes a fine tree in seven years. Plantations spring up almost like mushrooms, yet there is no tree indigenous to this province,—all are imported. Britain could have fed the world from such a fertile country.

Latitude 33 is the dividing line between tick-free land to the south and tick-infested land to the north. In the extreme north on the borders of Paraguay the climate sufficiently approaches the tropical for trypanosomiasis (Mal de Caderas) to occur.

It was a little difficult at first in one's travels to bear in mind that journeys to the *north* provinces would necessitate only taking light clothing, whereas journeys to the *south* meant provision against as bitter cold as it has been my lot to experience anywhere.

The Shorthorn far outnumbers other breeds of cattle, being about five times as numerous as the Aberdeen Angus, and nine times as numerous as the Hereford. The Shorthorn is mostly to be found in the Buenos Aires and Santa Fé provinces, the Hereford in Entre Rios and Corrientes.

* Text of a lecture, with epidiascopic illustrations, given on the occasion of a meeting of the Lancashire Division, N.V.M.A., at Liverpool University, on 6th March, 1929.

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To the north of the Argentine are found the poorer native cattle. These have only the foreign blood of their originally-imported Spanish ancestors which were released and roamed the plains increasing to vast numbers. These cattle, as you will see in the photographs, are very large scraggy, long-horned bovines, very useful for canning into corned beef and for meat extract, but of no use for export as carcases. Good work is being done in the north, however, in grading up these native cattle by crossing with English breeds, in spite of the big problem of piroplasmosis in the pure-bred cattle.

The principal breed of sheep is the Lincoln, crossed with the Merino for mutton. In the provinces of Entre Rios and Corrientes, often called the Argentine Mesopotamia, and in the Southern Provinces down to the Straits of Magellan, the Romney Marsh and Rambouillet breeds are met with. The native-bred sheep are in the North-West Provinces.

There are something like 30 millions of cattle and 35 millions of sheep in the Argentine, and about three million cattle and four million sheep are killed per annum, the bulk of these going for export.

The bulk of the fat steers are raised in the province of Buenos Aires. The leaner cattle of the northern provinces are turned into canned and other meat, the thinnest of all being used for extract of meat. Meat extracts are prepared at all frigorificos from the leaner cattle, fat cattle being unsuitable for this purpose. I believe there is no more genuine commercial product of any kind than meat extract, be it Liebig or Bovril. The Liebig factory is far up the Uruguay River at Colon, and the Bovril factory at the port of Bovril on the Parana River. Both these factories draw cattle from enormous distances by road and river to the north, and as time goes on have to go further and further afield to get the class of animal required. Both companies have their own farms, where they are improving the local breeds of stock. The Bovril Company has enormous holdings of land, and engages not only in stock raising and improvement, but also in arable farming and land settlement.

The Argentine is essentially a country of enormous estancias or farms for the breeding of all kinds of stock. Just around Buenos Aires dairying is in vogue and a wider circle around that city would enclose land now being used for crops rather than cattle. All Buenos Aires province is well supplied with railways, and the whole province is now fenced off into estancias, these again being divided by fences into paddocks. Like the towns, the country is divided into squares with the most monotonous regularity. The paddocks or fields may be several miles square, and, being flat, fences are generally invisible when motoring in the middle. Though I was there in winter-time there seemed in most places an abundance of lucerne and "Australian rye grass" growing as winter feed. Others fed maize or lucerne ensilage in winter as well as lucerne hay. Lucerne constitutes over one-third of all crops, then come wheat, maize, linseed and oats. In the north provinces there are immense orange, lemon and tangerine groves, and these trees, laden with their golden fruit on a background of green leaves, are a wonderful sight in early winter. Serious droughts are practically unknown in the country.

The River Plate is the centre for the frigorificos, preparing chilled and frozen meat for export, and the innumerable by-products connected with the industry. There are seven of these great factories on the River Plate, in addition to those higher up, its tributaries belonging to Bovril and Liebig, already mentioned. Most of them are near to Buenos Aires. There are close on two hundred ships engaged in the meat trade, some of the finest being British ships. Ships of considerable size can proceed long distances up the great rivers—to Rosario, for instance, which is, looking at the map, quite an inland town. Rosario not only ships meat but is the second largest grain port in the world.

Buenos Aires city has little attraction for the Englishman. It is a vast city and has some fine buildings, but that is about all one can say for it. Its streets are narrow, the traffic problem worse than in London, the inhabitants cosmopolitan, and the cost of living enormous. At the best hotel it may cost a married couple £50 weekly to live, but one can be fairly comfortable at other hotels on £25 weekly. Its climate is muggy and rheumaticky. The unfortunate attitude of the inhabitants towards women, and especially Englishwomen, an attitude which the authorities do little or nothing to combat, does not help foreigners to like the city. To the veterinarian there is a good deal of interest. The frigorificos are a never-ending source of interest. There is, in addition, a very fine animal quarantine station where imported animals are tested for glanders, contagious abortion and tuberculosis. There is a fine veterinary school, which is in the Faculty of Agriculture and Veterinary Science of the University, and there are public health and veterinary laboratories well worthy of inspection. The market of Liniers and its adjoining abattoir are worth visiting. Close alongside Liniers market an enormous new abattoir is now under construction.

There are racing and polo every Sunday afternoon, and consequently horse practice still exists in Buenos Aires, the Veterinary School having the advantage of this for the teaching of Surgery.

The Frigorificos.

The frigorificos are all at the water's edge, so that large ships or at least heavy lighters may come alongside close to the main buildings containing the freezing and chilling chambers. Proximity to the water gives another great advantage in that a considerable amount of stock can be brought from other parts of the country by river transport.

From what has been said it will be gathered that the main movement of stock for slaughter is, as it were, along the spokes of a wheel whose hub is Buenos Aires and the River Plate.

The oldest frigorifico was built in the eighties and the newest, the Anglo, was commenced in 1926. The latter is an English concern of the Vestey Company.

The majority of cattle arrive at frigorificos by rail, but large numbers also come by road and by river. Agents of the frigorificos go to all parts of the country purchasing stock, and having it drafted to the frigorificos. Some of the cattle and sheep travel direct from the estancia to the frigorifico, others come through the markets, having been sent to the markets by the estancieros and purchased by the frigorifico agents for despatch to the frigorifico.

Cattle which come to Buenos Aires from the northern tick-infested provinces have to be dipped when they cross the dividing line between the free and infested zones. Cattle coming down from tick-infested areas by river are not dipped when they cross this line, but are received at the frigorificos at special landing places, and are not allowed to mix with cattle from the tick-free areas before slaughter. In this way infestation of the tick-free areas with ticks is prevented.

It will be readily understood that any contagious disease, such as foot-and-mouth disease, for example, will tend to be more concentrated at the centre of the wheel than at the ends of the radii, namely, the estancias of the country. More especially will the concentration of disease be effected if cattle, prior to being landed at the frigorificos by road or rail, are first mixed with others and sorted out into fresh lots in markets and auctions.

The method of procedure in the slaughter of animals at these frigorificos is as follows. Cattle are received in the corrales until such time as they are required for slaughter, a batch is sorted out according to requirements on the day before slaughter, and penned so as to be ready to proceed up the ramp early the following morning. Slaughtering begins in the early hours of the morning in order that the complete process, down to the smallest procedure for that batch of animals, may be put through the same day. There may be two killings each day, one beginning in the early hours of the morning, and the other beginning at mid-day. The animals are first of all put through a bath; the purpose of this is to cleanse the skin. Having swum through this bath, the cattle are then penned under jets of water and allowed to stand there for a time in what is equal to torrents of rain, in order to cool them down before they walk up to the killing floor. As a rule, in frigorificos the killing floor is the top floor in the building. This arrangement enables the various parts of the animal to be dealt with by being sent down chutes to the floor below and so on until the ground floor is reached, by which time the various by-products are grouped together. The cattle, as will be seen in the pictures, go up a long ramp to the top floor. Any unwillingness to proceed up the ramp is overcome by means of an electric shock, and it is by this means also that cattle are forced into the swimming bath, and also under the water spray, because in none of the frigorificos are any of the men allowed to strike an animal; striking the animal leaves bruises under the skin and renders the carcase unsightly.

The electric shock by which the cattle are driven onwards is administered by means of a long wooden pole, at the end of which is a stud electrified by means of an insulated wire coming through the pole from the other end. Men on raised platforms alongside the ramp hold these poles and merely touch the cattle with them as they pass. The cattle, having moist or wet skins, readily receive a shock which is sufficient to make them run on. This method of subjecting cattle to an electric shock is used not only in the frigorificos but on the estancias as well in parts of the country where dipping is practiced against ticks and mange, and in the case of cattle which are regularly dipped the mere appearance of the electric pole, without the actual use of it, is enough to make the cattle which have felt the electric shock before, race on and plunge into the dipper. Cattle for slaughter, having proceeded up the ramp, are received into a pen prior to being driven one by one into the killing room. The method of killing the cattle is to drive them into a narrow run into which a series of animals in column are divided off separately. Each animal is then knocked on the head with a heavy hammer by a man standing on a platform above. In some cases the weight of the animal falling releases a catch which lets down the floor on which the animal has been standing, and the animal rolls out of the enclosure to one side. In other cases the floor of the stocks is released by a lever from above worked by the slaughtermen. The stunned animal is at once caught up by its hind legs by a chain from which it commences to run on an overhead trolley round the killing floor, commencing with the bleeding place. Each animal is let down on to the skinning floor, where it is skinned and the legs removed. The carcase is then hung up again from the floor by hooks placed through the tendo-Achillis, and still has the hide and head attached to it. It then proceeds by a slow movement round the killing floor almost without a stop until it is ready to be weighed and passed into the chilling chamber.

At various points round the killing floor are the inspectors of the Argentine Ministry of Agriculture carrying out their work of inspection. The arrangements for this inspection are excellent and everything possible is done by means of raised platforms or seats for the inspectors to facilitate inspection and make it as thorough as possible. The heads of the animals are received on a platform as the carcase passes, the hides are received at another point on the journey round, the thoracic and abdominal organs in turn drop out from the carcase, cut by the butchers standing above, and slide on to the metal benches at which the veterinary inspectors and their assistants carry out their work. There are some men who do nothing but examine livers; other men who do nothing but examine lungs; others who do nothing but examine certain glands; some for the glands and the lower parts of the carcase, some on platforms for the glands at the higher part of the carcase, and so on. It is one man's job to examine the prescapular gland, for example; it is another man's job to examine the iliac glands. Whenever a lesion of disease is found as, for example, distomatosis in the liver, actinobacillosis in the tongue, actinomycosis of the bones of the head, etc., a coloured tag is pinned on to the carcase, which tag signifies the disease and its situation in the carcase. In this way, as the carcase proceeds on its journey other inspectors can read at a glance by means of the tags the precise position and extent of the lesions, as in the case of tuberculosis, from which that animal had been suffering, and it is on seeing that record that the decision is taken as to which road the carcase shall take. The carcase can, for example, if the animal has been suffering from extensive tuberculosis, be switched off on to an overhead rail which will take it into the detention room for final inspection and decision as to its disposal. In some cases this further inspection decides whether part of the carcase can be passed or whether the whole shall be seized.

At all the benches where veterinary inspection is being carried out on the killing floor there is a series of chutes down which the different organs are passed after inspection. There is the chute for organs, heads, etc., which have

passed inspection, and a separate chute for those which have failed to pass. The various organs arrive at different places on the floor below to be dealt with accordingly. An inspector who finds a liver unfit to be passed on account of distomatosis draws his knife backwards and forwards across the liver, and so disfigures it that it is rendered unfit for consumption. The same applies to portions of carcases or entire carcases which have been found unfit for food. In the case of partial or entire destruction of a carcase it is dropped through an opening in the floor, protected by a lid, and passes through a crushing machine, where bones and everything else are crushed to fragments which are eventually turned into manures after sterilisation.

Each frigorifico has a chief veterinary inspector, and from six to twelve qualified inspectors, the number varying according to the amount of killing done at that frigorifico, and there may be as many as twenty to forty lay assistants.

The whole system of veterinary inspection of carcases after slaughter in the frigorifico struck me as being as near perfection as it would be possible to get it, and for that excellent system the Argentine is indebted to Colonel Dunlop Young, who went to the country in 1913 to advise the Argentine Government with regard to meat inspection. It must be very rarely indeed that any carcase or portion of a carcase is exported from the Argentine with tuberculous lesions in it; not only are carcases for export thoroughly inspected, but the same applies to cattle for local consumption. Meat for local consumption is derived not only from the frigorifico but from the Liniers slaughter-house in Buenos Aires and the Rosario abattoir, but no cattle from these slaughter-houses are ever used for export.

Where there was real weakness was in live inspection of animals awaiting slaughter in the frigorificos, and owing to the vast importance of this matter to Britain in connection with foot-and-mouth disease, this question was seriously gone into, and things are being tightened up. It is not easy to alter immediately the habits and methods of years.

Within a period of forty-eight hours from the time a particular animal enters the killing chamber it is sorted out into its various products. The carcase is in the chilling chambers for human food, or it is on its way to becoming meat extract. Its bones are all bleached white, classified, and drying in lengths suitable for export to Japan and other countries to be made into knife handles. Its blood is pressed, dried and powdered to make meal; its hide is under salt preparatory to being exported for tanning, and so on. Tongues, brains, livers, hearts, sweetbreads, cheeks, bladders, etc., are to be seen grouped in hundreds. Glue, animal charcoal, poultry bones, lard, margarine, etc., etc., are all in process of making. The number of by-products is amazing.

Throughout all the frigorificos, and I visited them all, there was a cleanliness, absence of smell, and wholesomeness such as I could not have believed possible in connection with an industry of this nature.

Transportation of Animals.

The views show the methods of transporting cattle and sheep by rivers in river boats specially constructed for this purpose; and give a clear idea of the type of wagons used upon the railways, showing how, almost throughout the country, "end-on" unloading is the rule. Only on one of the narrow gauge French railways did I see side-door loading and unloading carried out. The value of "end-on" loading and unloading is that it is a great saving of time. The whole train or a series of trains of about a dozen wagons is backed into the sidings of the frigorificos, the doors between the wagons are opened, and platforms between the waggons let down in such a way that the train is converted into a long tunnel. The door at the frigorifico end is opened, and the long string of cattle walk out quietly into the frigorifico. The system is a splendid one from the point of view of the frigorifico as regards saving of time, but it is an extremely bad one from the point of view of disease, in that, if one wagon load of cattle is infected with contagious disease and it happens to be the one next to the siding, all the rest of the cattle have to walk out into the corrales through the infected truck. Sheep trucks have two decks.

Large numbers of animals are driven very long distances by road in the Argentine, with a resulting very considerable loss in weight in fat cattle. There was much more travelling by road in the olden days than there is now, and it will be seen from the map how remarkably well the province of Buenos Aires is supplied with railways. It was no uncommon thing in years gone by, and still is in the further-removed parts of the country, for cattle to be a matter of months travelling to their destination.

On the rivers there are specially-built double-deck boats for the conveyance of sheep and cattle. One of these you will see on the screen, the photo having been taken near the Bovril port on the Parana river.

The river conveyances for animals, owing to the ample water supply, can be kept thoroughly cleansed. The position is very different on the railways. Waggons are supposed to be cleaned and disinfected according to the law, but cleansing and disinfection of them is practically non-existant, and this is an undoubted factor in the spread of such a disease as foot-and-mouth disease. That such trucks are a factor is well recognised by exhibitors of animals at shows, since they endeavour where possible to send valuable animals in merchandise trucks rather than the risky cattle waggons.

Driving animals by road cannot help being a fruitful cause of the spread of disease. Main roads are simply straight strips of country 100 metres wide, fenced off, with secondary roads 30 metres wide. These roads not only form the boundaries of estancias but frequently run right through the middle of them. Even when roads run through country where trees are so easily grown no attempt is made to grow trees for shade along the roads. Since stone is so scarce in all Buenos Aires provinces, the "roads" are not made up, and their condition with an alluvial soil as a foundation can almost be better left to the imagination than described. In rainy weather they are lakes or seas of mud up to the axles of a Ford car, and in dry weather they are axle deep in fine dust which hangs along the roads worse than any fog. Cattle pass along these roads and are in intimate contact on either side with estancia cattle through the single line of wire fence. When a drove of cattle stop for the night they receive grazing from the estancia where they happen to stop, and that grazing

may be right in the middle paddock of the estancia. Grazing for the night is often received *gratis*, as the estanciero expects similar facilities given to him when he may require them for his own cattle. The condition of a large troup of cattle on the march when it becomes affected with foot-and-mouth disease becomes appalling; the animals simply cannot be got along, and halts have to be made till the worst of the infection has passed off.

The Veterinary Services.

These services come under the Live Stock Division of the Ministry of Agriculture. The head of that Division may be, and often is, a veterinarian. Under him is a Chief of the Field Service, with 135 or more qualified veterinarians and a Chief of Frigorifico Veterinary Inspection with ten chief inspectors, seventy-three veterinary officers and 300 subordinates. In addition, there is a section for live stock markets veterinary inspection, and a section for railway waggon disinfection, though the latter is undeveloped. The section for controlling dipping stations for ticks is composed entirely of lay inspectors. Finally, there is the small section which deals so efficiently with the Quarantine Station at Buenos Aires.

It will at once be realised that the Field Service is numerically weak for such a vast stock-raising country, but the service cannot be greatly augmented at once owing to the shortage of veterinarians. All the men turned out by the schools are snapped up as soon as they qualify by the various sections of the service. It is only around Buenos Aires that one finds any veterinarians in private practice.

Government veterinarians are wretchedly paid; their salaries are such that they could not possibly live on them, even out in the country. On account of this, the pernicious system has arisen of men holding more posts than one. A chief inspector of a frigorifico may work at that job for the early morning hours, but by afternoon he is chief inspector to a nearby municipality, by tea-time he is principal of a boys' or girls' school, and in the evening he is teaching music or languages, a man of substance on £1,200 or more per annum. But this Jekyll and Hyde kind of arrangement has naturally a deplorable effect on the work done. A man who is both a veterinarian and a journalist must give more time to one profession than the other; certain it is that he is whole-time at neither, and that side of his work which brings in most pay receives most attention, and that is not usually the veterinary side. To the Englishman it would seem an outrage that any man should be allowed to be head of two government departments, drawing two salaries, yet such a thing can occur and does occur in Buenos Aires.

In spite of this criticism, I reached the conclusion that the veterinarian is no worse in these respects than other sections of the official community. The Argentine veterinarian, indeed, is generally a very hard-working man, and I developed a great liking and respect for him.

The Argentine is a great country for "quack" veterinarians and patent animal medicines, as well as for vendors of serum and vaccine. With the wonderful example of anthrax vaccine before them, estancieros may be excused for believing that there must be a vaccine or serum for every animal disease.

The Veterinary Schools.

There are three veterinary schools in the Argentine belonging to three of the five universities in the country. The principal veterinary school is part of the Agricultural and Veterinary Faculty of Buenos Aires University. A great deal of money is being spent at present by Government on this school. The Pathology and Surgery sections are completed, and were quite impressive. The racing and polo provide plenty of clinical material, and the Professor of Surgery evidently has the confidence of those fraternities, judging by the number of patients I saw on a surprise visit. The course of study is of four years' duration.

Diseases.

I lost no opportunity during my visit of studying every disease I came across and making *post-mortem* examinations where possible, also of observing the methods used in combating animal contagious disease.

It is not my intention here to do more than touch upon some interesting aspects of some of the conditions I met with.

Anthrax. It is safe to say that stock could not live in any part of the Argentine unless vaccinated against anthrax. The double vaccine of Pasteur is in favour where twice handling is no difficulty. The single-spore vaccine is used where one handling only is practicable. A very simple and neat little German-made syringe is used in anthrax inoculations. It has a little lever on which one presses, after insertion of the needle with syringe attached, and this presses home the piston exactly to the amount required to inject one dose. On releasing the thumb the lever returns to its former position by means of a spring ready for use in giving the next dose. Curiously enough, horses are not often victims of the disease, though I did come across one bad outbreak following on a number of deaths in cattle.

The beneficial effects of anti-anthrax vaccination are so patent to every estanciero that he becomes almost an inoculation enthusiast for all complaints, even those where there is no assurance that the cause is known.

If an animal is found dead in the country by a veterinarian his method is to open the abdomen and see the condition of the peritoneal fluid. If this fluid is not blood-stained he considers it safe to put his hand in through the opening and examine the spleen. In parts of the country where the miu-miu plant grows, such deaths in cattle on the march are very often due to poisoning by that plant.

Black Quarter. This disease occurs over large areas of country, very often along with anthrax. The double inoculation with vaccine is used, and is done at the same time as the anthrax inoculation.

Tuberculosis. Frigorifico records show that only some five per cent. of bovines are infected with this disease. This being the case, it is not surprising that strict precautions are taken to see that imported animals are tubercle-free. On the estancias tuberculosis is regarded with some dread, and most estancieros do their own tuberculin testing.

Actinomycosis. Frigorifico records show that both the streptothrix disease and actinobacillosis are present in the Argentine. It will be remembered that it was in the

Argentine that the actinobacillus was first discovered, since when it has been found in all parts of the world, and shown to be responsible for perhaps 70 or 80 per cent. of actinomycosis cases in Britain.

Contagious Abortion is certainly not rife in the Argentine as it is in Britain. Imported animals are all tested by the agglutination test on arrival at the quarantine station. Bleeding for the test is done habitually from an ear vein.

Parasites. Animal parasites seem to be as great a cause of loss as in other countries. Distomatosis and echinococcosis exist, and the losses from stomach worms and verminous bronchitis in sheep are considerable. The copper sulphate treatment for the large stomach worm (*H. contortus*) is well known, and in some parts arsenical solutions are used. A simple drenching tin, which at the same time is a measure for the dose, is used. This is the usual conical tin, but has a square window cut in the side so that the base of the window is at the height of the required dose. This tin is simply pushed bottom first into the bucket of solution and, on lifting out, at once drains to the correct dose. The thumb is placed over the window while dosing. Mange is very prevalent on many farms in the Argentine.

Caseous Lymphadenitis. This disease is very common in the Argentine, and is especially prevalent in the sheep flocks of Patagonia. It is the cause of loss, because affected carcases are unmarketable in this country. Lesions cannot always be detected by simple palpation of the lymph glands. They may be missed unless the glands are cut into. Some members of our profession were engaged during last sheep-killing season in Patagonia especially for carcase inspection for the lesions of this disease, and I am indebted to Mr. Mills, a graduate of this University, and to Mr. Hunter, M.R.C.V.S., for some very nice specimens shewing lesions, in our museum collection. Neither chilliing nor freezing kills the bacillus of Preisz-Nocard in the lesions.

Piroplasmosis and Anaplasmosis. I found these conditions of particular interest, as I had not come across them before in South America. The map I have here will shew you the dividing line between the tick-free and tick-infested areas. This line is gradually being pushed a little more north by means of systematic dipping. There was, of course, always a natural line of latitude below which the tick (*Margaropus annulatus*) could not exist, and what dipping has done is merely to carry this line further to the north. Between the double line of dipping stations is what is called the intermediary zone. The Margaropus is not a dropping-off tick, like the Ixodes of this country. It lives through all its moults, from larva to adult, on the body of its host, and consequently systematic dipping once a fortnight in the tick-infested zone would be sufficient to eradicate it. At first I used to urge this upon estancieros in the north, but was met with the reply that it would not pay them to rid their land of ticks until everyone else did likewise, since they would have no sale for bulls reared on tick-free land, as these would die as adults when taken to tick-infested farms. Tick-eradication can only be accomplished by Government pushing the existing line northward in the way now being done. Notwithstanding this, dipping has to be regularly carried out to keep ticks down in numbers, and the views will show you the construction of several of these dippers and cattle passing through them. I was not in the country during the real tick season, but was told that, without dipping, ticks become so numerous that you could not stick a pin anywhere on the skin of a bovine without touching a tick.

Imported bulls are kept in the tick zone, but they have to be housed and kept on sand to keep them free of tick and tick-fever. They are exercised in an enclosure bare of all vegetation. Their temperatures have to be taken twice daily, and on any rise being observed a large dose of trypanblue is passed into the rumen direct by means of a trocar and cannula, by the estanciero. If this was not done fatal piroplasmosis would result. They call this "intraperitoneal inoculation," but there is no doubt that the fluid passes into the rumen. A large business in blood-inoculated immunised bulls is done between the tick-free south and tick-infested north. There is little risk in inoculating calves in this way, but cases shewing severe reactions are saved by trypanblue. Blood for this purpose is supplied by firms in Buenos Aires to farms below the tick line. I was surprised to be told that as many as six blood inoculations were necessary to get a reaction with consequent immunity, and argued that, provided the parasites were present in the blood, *one* inoculation must be sufficient, and the whole process was a comparatively simple business. After much discussion I was surprised to be told that estancieros immunising young bulls did not want the method to be too easy or everyone would enter the immune bull trade. In other words, mystery is made of it, almost a monopoly exists, and the high prices for immunised bulls continue to reign.

It has to be remembered there are two piroplasms in the Argentine, the *Babesia bigeminum* and the *Babesia argentina*, and that blood for immunisation must contain both these parasites as well as the *Anaplasma argentina*. Following inoculation two reactions occur, one from piroplasmosis, commencing a few days after the injection, and one about a month after from anaplasmosis.

Enteque. I heard of this condition before leaving for the Argentine, through Mr. Kendrick, of Tarvin, who had been told of it by someone who had been in the country. Hutyra and Marek have something to say on this disease. I soon found that enteque is a word mainly used for young animals which suffer from a wasting diarrhœa, becoming terribly thin and very tucked up ; photos of which you will see on the screen. The condition sets in soon after weaning and the animals die in a matter of weeks. Housing and nursing may pull some round, but the majority die. Losses from this disease may be very considerable. On one farm I found forty enteque calves in one house, gathered for treatment. I made a number of *post-mortem* examinations of this condition. Lignières describes the condition as a chronic form of hæmorrhagic septicæmia, but there is no parallel in hæmorrhagic septicæmia, in India and countries where that disease is well recognised, with enteque, nor have vaccines and sera from bipolar organisms had the slightest effect upon the incidence or course of enteque. Experienced estancieros were inclined to think the condition might be due to animal parasites in the alimentary canal. In the animals I post-mortemed there was no constant lesion. There was no reason to think animal parasites had anything to

do with it. In some the lesions were pneumonic, in others gastric, and I came to the conclusion that some general weakening and debilitating factor was at work which allowed various bacteria to attack the organs. I killed early cases and late cases without finding any constancy of lesions. Eventually the almost certain explanation appeared to be too-sudden weaning. Losses were greatest where a herd was weaned on a certain day; all weaned at once because it situated the management. Where the weaning process was more gradual and the herd looked over frequently, weaning only those ready to be weaned and leaving those not ready, the losses were negligible. On the coast zone of Buenos Aires province the word "enteque" is applied to quite a different condition and is often termed a "dry enteque." This is obviously a mineral deficiency disease. It only occurs on a narrow coast belt of perhaps ten miles in breadth, and symptoms disappear when sick animals are taken further inland. The bones and joints become affected, the animals walking with straight limbs, as though on stilts, very tucked up, but with no diarrhœa. They may be ill for perhaps three years before they die. The condition affects not only cattle, but sheep, horses and pigs as well. The cases I saw were all in Aberdeen Angus animals. Hutyra and Marek have written a tragically-confused account of enteque because they have mixed up the writings of Argentine writers on the coastal zone disease with those on the other form seen inland, and tried to make one account of them. Doubtless the confusion has arisen owing to the word "enteque" being applied to both.

"*Grass Disease.*" I visited one large estancia for a few days at the request of the Scottish manager, who had read all that had been written about so-called "grass disease" in Britain. There were, unfortunately, no cases during my visit, as it was not the right season, but I got farm horses and demonstrated on them how symptoms commenced and developed in Britain, giving the fullest possible description. This observer and his staff were convinced that the disease from which they lose so many horses is the same as, or very closely allied to, "grass disease."

Foot-and-mouth Disease. This disease, as a result of my visit, might be made the subject of a quite voluminous article in itself, but it is not my intention to discuss this disease in all its aspects in the Argentine at present. I might be permitted to preface a few remarks, however, by saying that on no subject have I seen more nonsense written in this country, not omitting the statements of those men who have made special visits to see conditions in the Argentine. I have seen it stated that the Argentine is "full of foot-and-mouth disease." That is untrue. I have also seen it stated that so many thousands of animals were examined without seeing foot-and-mouth disease. That statement means nothing, and is valueless as an observation.

Foot-and-mouth disease is enzootic in the Argentine, and can always be seen somewhere, no matter into what Province you go, except in Patagonia, where the sheep farms are free.

Periodically it passes as a wave over the country, but minor waves of lesser extent may be experienced. The disease being enzootic, the proportion of animals attacked on any one estancia is much less than the number which would become affected on a farm in Britain, for the simple reason that many have been through attacks of the disease previously. I see no reason to conclude that the disease is any milder in the Argentine than in other countries; in fact, heavy losses are sometimes experienced. I have driven through herds and seen animals obviously dying from the extensive lesions. The losses in calves may be tremendous. But is not all this what one would expect? The Argentine Ministry of Agriculture have never denied the existence of the disease in that country. What we are asking them to do is to take precautions to see that they do not kill for export animals in the incubation or infected stages of the disease, and in spite of the enormous difficulties in the way of ensuring this the Argentine Ministry is bravely striving to bring this about. Personally, I think it would be tantamount to expecting the impossible to expect them to prevent the escape of *all* infection in carcases, even after several years' further effort in organisation and even supposing they carried through all the recommendations made to them. We must not forget in this country that close on 50 per cent. of our meat supplies come from the Argentine, and that vast British interests are wrapped up in that country, not to speak of the enormous shipping and trade interests involved. We might also remember that the veterinary services in the Argentine are, in the words of their Chief to me, doing their very best to meet the wishes of Britain in regard to foot-and-mouth disease.

The Quarantine Station.

The photos I took of this station give you some idea of what the place is like. There are buildings for all species of animals and the whole is now being surrounded by a high wall. The station now nearing completion is all practically new. It is in most capable hands. I do not remember seeing anything in veterinary circles more efficiently run. In spite of the pleasure that feeling gave me on my visits, I never felt quite at ease once I knew of the existence of that enormous book shewing many years' record of bulls exported from this country after passing the tuberculin test and slaughtered as reactors in the Quarantine Station in Buenos Aires. Surely they could not all, or even the majority of them, have been merely in the incubation stage of tuberculosis when tested here, and it did not take much effort to read the thoughts of those in charge of the Station regarding the value of the tuberculin test in Britain as they turned over the pages of the record book.

I feel I cannot conclude my remarks without paying a tribute to all those veterinarians whom it was my pleasure to meet in the Argentine. One simply could not have been treated with more consideration than I was by my brother professionals all the time I was in the country, and I look back on my experiences with the greatest of pleasure. The same remarks apply to a host of estancieros and people connected with farming who went out of their way to help and make my visit and my wife's successful and pleasant.

Mix a mustard plaster with white of egg, and it will not cause a blister on being applied to a tender part of the skin.

Marking of Laboratory Vessels.

By W. Jackson Young, F.R.C.V.S., D.V.S.M. (Vict.), Newcastle-upon Tyne.

Where samples or specimens are being examined it is of great importance that there should be no confusion, and that suitable methods of identification be adopted. In some cases only a temporary mark is required, while in others permanent marking is necessary.

Marking articles made of glass. Several manufacturers now supply glass beakers and flasks with a roughened patch about the size of a sixpence. This patch takes on ordinary lead pencil marks very well, and the marks can be removed by scouring. Glass can also be marked with a diamond, but a decided disadvantage to this method is the fact that the vessels are apt to break at the mark when heated.

For marking slides used for microscopic examinations, the diamond method answers well. In some cases hydrofluoric acid is used for marking glass. Its use requires care and time. Waterproof Indian ink is also used. It has a tendency to crack off the glass. Grease pencils of various colours are also obtainable. They are not practical when the vessels or apparatus are required to be heated or submitted to moisture.

For several years the writer has used a thin solution of Canada balsam for labelling slides. This solution can be written on with ink when dry and the record preserved by a second coat painted over it.

A coloured spirituous solution of shellac, used as ink, is highly recommended. The ink is best made as follows:—a 15 per cent. solution of button shellac in methylated spirit is left, with occasional stirring, for a day or two in the cold to dissolve. Any spirit-soluble dye is added for colouring the solution. This ink can be applied with an ordinary pen, and the pen should be cleaned immediately after use.

Stephens' "Outdoor Ink" is very useful for marking glassware and tin. It is unaffected by steam and can be removed by benzol or other solvents.

Marking tin containers. Ordinary labels do not adhere well to tin. The following method was used by the writer when in general practice. The part of tin on which the label was going to be applied was cleaned with fine emery powder. A small quantity of tinct. benzoin co. (friar's balsam) was painted on the part and ignited. The paper label was damped and placed on the resinous residue left after ignition. Satisfactory adhesion takes place.

Marking porcelain vessels. Special aluminium pencils are sold for this purpose and are satisfactory. Ordinary ink does well, provided the marking is heated with a blow pipe.

A solution of cobalt nitrate is also frequently used.

The New Minister of Agriculture.

Mr. Ramsay MacDonald, accepting office on the resignation of Mr. Stanley Baldwin, has appointed Mr. Noel Buxton to be Minister of Agriculture in the new Labour Government. Mr. Buxton is one of the few Ministers in the previous Labour Government of 1924 to hold a similar office now. He was wounded by a would-be assassin in 1914, while engaged on a mission to secure the adhesion of the Balkan States to the cause of the Allies in the war.

VETERINARY THANKSGIVING FUND.

First List of Subscribers.

Following is the list of subscribers to the above Fund, as it stood on 18th June, 1929:—

	£	s.	d.
J. Anderson, M.R.C.V.S., Keith	1	1	0
W. Anderson, M.R.C.V.S., Brumscar ...	1	0	0
Col. W. S. Anthony, C.M.G., and Officers R.A.V.C.	2	2	0
J. R. Baxter, M.R.C.V.S., Lechlade	1	1	0
Lt.-Col. J. W. Brittlebank, C.M.G., M.R.C.V.S., Manchester	2	2	0
W. H. Brooke, M.R.C.V.S., Birmingham ...	0	10	6
M. G. Byerley, F.R.C.V.S., Greenwich ...	1	1	0
J. H. Carter, F.R.C.V.S., Henley-on-Thames	0	10	6
D. Cumming, M.R.C.V.S., Peterculter ...	1	0	0
J. T. Edwards, D.Sc., M.R.C.V.S., Fetcham ...	1	1	0
J. C. Davidson, M.R.C.V.S., Min. of Agric. ...	0	10	6
O. A. Ducksbury, M.R.C.V.S., Lancaster ...	1	1	0
Capt. J. Forbes, M.R.C.V.S., Truro	0	10	6
Prof. S. H. Gaiger, F.R.C.V.S., Liverpool ...	1	1	0
G. H. Gibbings, F.R.C.V.S., Tavistock ...	1	1	0
Major S. D. Gillespie, M.R.C.V.S., Malahide ...	0	10	0
Tom Hare, M.D., M.R.C.V.S., London ...	1	11	6
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H. L. Jones, M.R.C.V.S., Denbigh	1	0	0
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C. Masson, M.R.C.V.S., Torquay	1	1	0
H. Morphew, M.R.C.V.S., Cranbrook ...	2	2	0
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D. S. Rabagliati, B.Sc., M.R.C.V.S., Wakefield	1	1	0
Lt. A. G. Ralston, R.A.V.C.	1	1	0
Lt.-Col. R. W. Raymond, R.A.V.C.	1	0	0
Col. H. A. Reid, F.R.C.V.S., London ...	1	1	0
W. Roots, M.R.C.V.S., Brighton	2	2	0
Capt. W. Sewell, M.R.C.V.S., Uckfield ...	0	10	6
Prof. E. S. Shave, F.R.C.V.S., Crowhurst ...	1	0	0
A. Leslie Sheather, D.Sc., M.R.C.V.S., London	0	10	6
Major W. S. Stevens, R.A.V.C. (T.F.) ...	1	1	0
H. Sumner, M.R.C.V.S., Liverpool	1	1	0
Messrs. Sutton, Stainton & Ollerhead, London	2	0	0
L. C. Tipper, M.R.C.V.S., Birmingham ...	1	1	0
Capt. P. J. Turner, M.R.C.V.S., Bromley ...	2	2	0
Wm. Watt, M.R.C.V.S., Min. of Agric. ...	0	5	0
S. A. Winkup, M.R.C.V.S., Montgomery ...	0	10	6
Capt. J. Stow Young, M.C., M.R.C.V.S., Wallington	1	1	0
	£71	4	6

The Veterinary Record.

22nd June, 1929.

THE WORK OF COUNCIL, R.C.V.S.

The present would seem to be a fitting opportunity for giving some description, for the benefit of readers of the *Veterinary Record*, of the work which the Council of the College is carrying on for the profession. The Annual Report, which has just been issued, is a very concise summary of a year's work, and the following comments on it seem called for.

BYELAWS: It is the Council's duty under the Charter to frame byelaws for the carrying out of its functions, and the most important of these concern the Examinations for admission to the profession. Not a year passes but some amendment, some improvement, is made to the Byelaws and much of the time and attention of the Council is taken in framing these so as to march with the progress of the times. The Report merely records what has been done. It would take a volume to record the reasons why it was necessary and what improvement is involved in the change. A single amendment means that an alteration has suggested itself as necessary; the need for it has been discussed, possibly at several meetings, the final form of the amendment has been agreed upon, and then two special meetings have been called to pass and confirm the alteration. An amendment so made must then be given effect to and any persons and institutions affected must be made aware of it. This process is going on continuously and it is the clearest sign that the Council is alive and awake to the needs of the moment, and is constantly adapting its machinery to fit new circumstances.

EXAMINATIONS: The figures of successes and failures at the Membership Examinations form a bare statistical table around which, however, much can be said.

Few members are aware of the unique position held among professional bodies by the R.C.V.S. in respect of its control over admission to membership. There is no more democratic body in the country. Members of the College have the power of electing members of the Council. The Council elects the Examiners. The Examiners—with only a few exceptions also members—acting within the Byelaws of the College, select those who are fit for admission to the profession. The R.C.V.S. has, therefore, all the attributes of a living entity—it is self-contained, self-reproductive, self-governed. It has consequently all the more serious a responsibility towards the public whom the profession serves, a responsibility which it has to bear alone. Its high sense of duty has led it to strain every effort to establish and maintain the highest possible standard of training and examination for admission to its membership. To do this it has impoverished itself. The members of Council ask not only for no reward for their altruistic labours—they give both their time and money ungrudgingly. The Examiners undertake a burden, the like of which the Examiners for probably no other institution are asked to bear. They must travel twice a year, whatever the weather, to Dublin, Glasgow, Edinburgh, Liverpool and London—always in haste, for the examinations cannot be begun till the teaching is ended, and they must be completed before the vacations can be begun. The number of pupils is often small, and the work therefore must often lack interest, and they do it for a payment which, though as generous as the College can afford, falls far short of the worth of their services. Members of Council are expected to attend the examinations and those who are specially interested devote an immense amount of time and trouble to this work. Not only so, but there is continual examination of the curriculum, with a view to its revision, and during the past year many have been the hours of fruitful discussion on this subject. The whole intelligence of the Council is directed to elaborating a revision of the syllabus of examinations so as to meet every requirement that can properly be demanded as regards the all-round training of a veterinary surgeon.

These remarks apply with almost as much force to the Examinations for the Fellowship Diploma and for the Diploma in Veterinary State Medicine. For both these Diplomas the regulations have been improved and members of the College have no cause but to be proud of the high standing that these two Diplomas—thanks to the care with which the examinations have been organised—now have in the eyes of the public.

PARLIAMENTARY COMMITTEE: The extreme importance of the activities of this Committee to every individual member of the profession needs to be emphasised. It is true that little is shown in the Annual Report, but the constant and strained attention with which the Committee watches over the interests of the profession, so as to be ready to make representations in the right quarter at the right time, deserves every commendation.

PROFESSIONAL ETIQUETTE: Perhaps the generality of readers are more interested in the work of the Registration Committee—and indeed there is no Committee of the Council which has more difficult, more delicate, more unpleasant tasks to perform. The Registration Committee has two duties: (1) to institute prosecutions against persons who being unregistered use a title prohibited by the Veterinary Surgeons' Act; (2) to enquire into all allegations of unprofessional conduct amongst members and to guide the Council in its important duty of maintaining the Register of Veterinary Surgeons as a register of qualified professional men, bound by a code of ethics as high as that of any other learned profession, and therefore of men whom the public can trust and respect.

In carrying out both of these duties the Council is often subject to much uninformed criticism of members of the profession. In the first class of case, members

have been heard to say: "Why does not the Council stop all this 'quackery'?" "Why does the Council allow unqualified men to practise everywhere?" Never was a more ignorant question asked. The Council can only act within the powers which have been given to it by Parliament, and since Parliament has not seen fit to prohibit unqualified persons from practising it is no use blaming the Council of the College. Even when the Council does have an opportunity of instituting a prosecution for the use of a veterinary title by an unqualified person it does it at great expense, and sometimes without success. Cases have occurred during the past year where unimpeachable evidence was produced of a breach of Sect. 17 (1) of the Act, but where the magistrates refused to convict. Magistrates may even employ the "quack" who is brought before them, and they and many of their class are not infrequently prejudiced in favour of "quacks." Members should look at the relation of the medical profession to the public. Were it not for the statutory provisions for the registration of deaths, the public would, in fact, be less protected from the unqualified practitioner and medicine vendor than it is from the ministrations of "quack" animal doctors.

The Medical Act alone gives less protection than the Veterinary Act. No, there is only one remedy against quackery: that is for every member to make himself as complete a master of his science and practice as he possibly can. With his four years' scientific training on which to base his practice, he ought to have little difficulty in maintaining his supremacy.

With regard to the second class of cases dealt with by the Registration Committee, it is often alleged that the Council takes notice of anything A may do which may be out of order, but never pulls up B, who breaks the rules every day. Now it must be remembered that the Council of the College is not there to act as policemen to make charges against its own members. If no one ever reports B for a breach of byelaws, the Council can have no knowledge of it. And if someone merely asserts that B is advertising, or touting, or employing an unqualified assistant, the Council cannot act without evidence. To take action on the mere allegation of one man against another would be outrageous. Members would never be secure against frivolous charges. But when *prima facie* evidence is produced the Council never fails to investigate. It may often have to give up a case because it has not been supplied with incriminating evidence, but in this respect it is no worse than the ordinary Law Courts. Many criminals are known to the police who cannot, for want of evidence, be brought to justice. Many an injustice between citizens remains unrighted for the same reason. All human institutions are subject to this defect, and it is absurd to expect the Council of the R.C.V.S. to be an exception to the rule. The profession may well rely on the integrity of the members of Council who are there honestly to do their duty and to maintain the ethical standard of the profession as well as it lies within their power. It is easy to criticise without knowledge of the difficulties of their task, and it must always be remembered that it is within the power of any member to be nominated himself for election to the Council which he criticises, in becoming a member of which he would at least have his eyes opened.

FINANCE: It seems to be a common impression that the R.C.V.S. is a rich body. Nothing could be further from the truth; indeed, if any charge against the profession could be said to be well founded, it would be that it had always been improvident—in the sense of omitting to provide its executive with sufficient funds to carry out the duties expected of it. The pioneers who conceived and brought into being the Charter of 1844, spent their own money on the task, but in founding the College they overlooked the provision of any means whatever for carrying it on. In 1844 the R.C.V.S. was nothing but a name. It had no place to lay its head, no means of paying its way, nothing but duties to perform and burdens to bear. It was allowed the privilege of charging a maximum of ten guineas as admission fees, and this was its only source of revenue until 1883, when it was permitted to charge thirteen guineas. In 1892 the amount was increased to £21, and it has so remained for the past thirty-seven years, while the expenses of running the examinations have gone up by leaps and bounds and the value of money has fallen. Until annual fees became payable in 1921, the College had no other income, and it is not untrue to say that for three-quarters of a century it lived from hand to mouth. It could not pay for efficient service—though it often got what it could not pay for; it could only carry on a half-hearted existence, starved and strangled as it was for the wherewithal to live. Even when the profession had been aroused, as it was by 1907, to make provision for proper supplies to carry on its work more efficiently the supply was delayed for fourteen years, mainly owing to the opposition of a small minority of the profession, most of whom, let us hope, have seen the error of their ways. If the Bill had passed in 1908 or 1909, as it might well have done, apart from this opposition, the profession would have been £30,000 to the good, and that sum invested would have added £1,500 to the annual income of the College. As it was, when the Bill did pass in 1920, the estimate made in 1907 that a fee of £1 1s. 0d. per head per annum would suffice, was altogether upset by the enormous drop in the value of money, so that the College is scarcely better off now than it was before the war. How different would be the present position of the profession, however, if, as any guild or association of workmen would have done, a contribution of a guinea a year (less than sixpence a week) had been levied on the profession from the beginning.

With a few splendid exceptions, the profession has not shown itself willing up to now to contribute any considerable financial help to the body corporate. While doctors leave legacies to medical schools and hospitals, while lawyers leave legacies to law schools and libraries, while great scientists found chairs of science at Universities, when do we read—since the

(*Continued at foot of first column next page.*)

ROYAL COLLEGE OF VETERINARY SURGEONS.

Annual General Meeting.

The Annual General Meeting of the College was held at 12 o'clock noon, on Thursday, June 6th, 1929, at the College, 10 Red Lion Square, London, W.C.1, with Dr. J. Share-Jones, President, in the Chair. There were also present Major J. Abson, Lt.-Col. J. W. Brittlebank, Prof. J. B. Buxton, Mr. J. C. Coleman, Major G. W. Dunkin, Major F. L. Gooch, Prof. F. T. G. Hobday, Messrs. N. Hole, G. H. Livesey, Prof. J. McCunn, Mr. J. W. McIntosh, Major-Gen. Sir John Moore, Messrs. J. H. Poles, J. Rowe, Dr. A. Leslie Sheather, Lt.-Col. P. J. Simpson, Prof. J. D. Stewart, Messrs. A. L. Thomas, S. Villar, J. Willett, Prof. G. H. Wooldridge and Lt.-Col. T. Dunlop Young.

The SECRETARY and REGISTRAR read the Notice convening the meeting, as published in the *London Gazette*. He next announced that letters regretting their absence had been received from Mr. Carter, Prof. Gaiger, Principal Bradley, Mr. Holroyd, Mr. A. Gofton, Sir John M'Fadyean, Principal Whitehouse and Mr. Harry Locke.

The SECRETARY read the minutes of the previous Annual General Meeting, which were approved and signed.

ELECTION OF COUNCIL.

The SECRETARY read to the meeting a letter which had been addressed to the President by Mr. A. Gofton, as follows:—

Edinburgh, *May 28th*, 1929.

"Dear Mr. President,—I have decided on personal grounds to tender my resignation as a member of Council and I herewith place my resignation in your hands. I regret I do not see my way to complete the term of office for which I was elected two years ago, but I think I am correct in stating that the Annual General Meeting next week will provide the opportunity for filling the vacancy created by my resignation.—Yours truly, A. GOFTON."

The Secretary added: I ought to say that, in accordance with the provisions of the Charter, it would appear to be in order to elect one of the members nominated for election to fill the vacancy thus created.

The report of the Auditors is as follows:—

WE CERTIFY that we have checked the voting papers sent in for the Annual Election of nine members of the Council of the Royal College of Veterinary Surgeons, and the number of votes obtained by the twelve members nominated for the vacancies are set out below against their respective names. Fifty-three voting papers were spoilt, and were accordingly cancelled.

Name.	*Votes.*
Hobday, F. T. G. ...	853
Simpson, P. J. ...	849
McKinna, J.	773
Dunkin, G. W. ...	746
Spencer, T. F. ...	719
Macqueen, J.	717
King, W. S.	702
Carter, J. H.	689
Young, T. D.	657
Walker, G. K. ...	501
Rabagliati, D. S. ...	454
Kirk, W. Hamilton ...	391

(*Signed*) Woodhouse & Wilkinson.

The eight who take the place of those who retire in rotation are the first eight on the list.

The PRESIDENT: I hereby declare the following gentlemen to be elected members of the Council for four years:—F. T. G. HOBDAY, P. J. SIMPSON, J. MCKINNA, G. W. DUNKIN, T. F. SPENCER, J. MACQUEEN, W. S. KING, J. CARTER.

The SECRETARY: In accordance with the Charter, the one member who is to be elected in place of Mr. West, whose term of office expires in 1930, should be Colonel G. K. Walker; and the one in place of Mr. Gofton, whose term of office expires in 1931, should be Colonel Young.

The PRESIDENT: I declare Colonel G. K. WALKER and Colonel T. D. YOUNG elected accordingly.

THE WORK OF THE YEAR.

The PRESIDENT: The next matter is the Annual Report. The Report has been printed and circulated, and in presenting the Report and the Statement of Accounts for the year, may I be allowed a few words in amplification of what is here perhaps too concisely set out?

Among the outstanding events of the year, mention ought specially to be made of the negotiations with the Irish Free State for the purpose of regularising the relations of the College with that Dominion. An Agreement has been drafted to provide that the College shall continue to be responsible for the examination of the students of the Royal Veterinary College of Ireland, and shall continue to admit Graduates of that School to the membership of the College, and to register them in the Register of Veterinary Surgeons. As, however, the Free State desires to maintain its own official Register of Veterinary Surgeons, in the same way as it now has its own Registers of Medical Practitioners and Dentists, it has been agreed that such a Veterinary Register shall be established for the Free State. Details of the agreement have yet to be worked out, but there is every reason to hope that during the present year the whole matter may be amicably settled.

I need only add, in regard to this, that we pay tribute, and justly, I think, to those, from the Ministers downwards, with whom we had to deal and whom we had the honour of meeting, for the extremely courteous, and indeed generous, way in which they discussed this matter with us.

Another matter of importance, though it only indirectly comes within the work of the Council, is the Report of the Colonial Veterinary Services Committee, before which your

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(*Continued from previous page.*)

death of Dick in 1866—of a veterinary surgeon leaving money to advance his profession? Let no man say that veterinary surgeons do not leave fortunes behind them. Many entries of wills reported in these columns have shown sums left of over five figures, and not a single penny given to veterinary education. It is, of course, true that nothing is received from outside sources. But let it still be the pride of the profession that it is independent and self supporting. "We are members one of another," not only in the present but for the future. No member of the veterinary profession can leave a nobler memory behind him than that he did what he could to endow the future.

President, Colonel Brittlebank, and the Secretary appeared to give evidence. The proposals made in that Report are of a very far-reaching character, and it is not too much to say that if the scheme outlined for the recruitment of the Colonial veterinary services can be realised, it will mean at once an increased demand for the services of highly-trained veterinarians.

I cannot pass over without comment the work of the Examination Committee in the revision of the examination syllabus. No more important work has ever been undertaken by the Council. But because of its importance and its intricacy, progress with the task can only be slow. Members of the profession outside the Council may be excused if any of them should think that this is a matter of urgency. It is a matter of urgency, but it is far more important that the work should be well done than that it should be quickly done, and the number and variety of matters to be weighed and sifted are such as to require much time and patience.

I should like to add to that paragraph, which has been officially so well prepared, my own personal tribute, as President, to the work of the Committee, month in, month out. It is only those who have been associated with the revision of educational syllabuses who can appreciate the magnitude of the work involved. And it is the kind of revision that must constantly take place if we are to keep abreast of the times. Education is constantly developing, and the dealing with educational matters is probably the knottiest of all problems. The bringing before you of this paragraph reminds me of what an old politician told me many years ago, referring to education. It was, that if you have a political enemy and you desire to place his feet on a slippery slope, persuade him to introduce an Education Bill. I think the Chairman of the Education Committee will appreciate all the difficulties involved in a piece of advice of that kind ; and, if I may mention an individual name, we are particularly indebted to the Chairman of the Committee, Professor Buxton—(applause)—for the extreme pains he has taken in dealing with this extremely important problem.

The rest of the report, gentlemen, I think, speaks for itself. Any questions you may desire to ask concerning it, the Registrar or myself will be pleased to answer, if we possibly can do so, whilst we are going through the report page by page, as it is customary for us to do.

The report is in your hands, gentlemen, and I move that the report be received.

Colonel BRITTLEBANK : I second it.

As the report was being passed page by page the PRESIDENT said : I ought, with regard to the important question relating to this College and the Irish Free State, to pay a tribute to the very important work that has been done in this connection by my predecessor in this high office, Colonel Brittlebank—(applause),—and, although it is not my custom to throw bouquets at officials, to our official Registrar and Secretary, Dr. Bullock. (Applause.) And, in addition, I think there is a colleague of ours who meets us constantly in this room to whom I ought to pay tribute, and that is Principal Craig. He has been placed in a position of extreme delicacy. It is not an easy problem to solve, and the very sound judgment which has always been at our disposal at his hands has been, I think, a material help to all of us. Colonel Brittlebank will bear me out in making that statement.

You will note, on page 4, with regard to the Public Health Act, that it is the intention of this Council to secure an alteration in the law, which is much needed, and which can only be secured with a considerable amount of fighting. It is to secure, if possible, such an alteration as will give our men that standing in regard to this work to which we feel we are justly entitled. (Hear, hear.)

There is a matter on page 6 in regard to the free treatment of sick animals of the poor, which is assuming the position of a great question. I think, and those who are engaged in dealing with that problem feel also, that the matter is one of the greatest importance to the profession, and that it will require very delicate and firm action on the part of this Council to bring it to a solution which will justify us as a profession in relation to the treatment of animals, and which will, in the end, be of major public interest. More than that I need not say at present.

On page 10, Mr. F. L. GOOCH said : I should like to be allowed to express my agreement with you not only in regard to the work done by the Committees of the Council, but by the Council in general, as reported on pages 1 to 8, but I wonder whether anything can be done to give a little added interest to the younger members of the profession, to encourage them to come forward to present themselves for the Fellowship examination. The examination fees have, for some time now, barely covered the expenses of the examination. I think that if the Council could put their heads together and give some further inducements to the younger members of the profession to take this higher diploma, it would be taking a big step towards raising the prestige of the profession. I think it is the fact that this year only five candidates received the Fellowship diploma, and the examination is conducted at what is practically a monetary loss every year.

The PRESIDENT : I do not think anything would gratify the Council more, and not only on financial grounds ; I should be very sorry to see that as the only ground for inciting members to take the Fellowship. On academic grounds the Council would indeed be pleased to see more of the younger members taking the highest qualifications which the College has to offer. Possibly this mention of it here by my colleague will be the means of bringing it more to the attention of those who are aspiring to higher professional status.

On page 16, the PRESIDENT said : If any member can give assistance to the Registrar in the way of discovering the addresses of members as mentioned on this page, I have no doubt it will be acceptable.

If there is no further observation to be made, I move the adoption of the report.

This was put to the meeting and declared carried unanimously.

Mr. COLEMAN : Will it be in order to add the regret of this Council and the members present at the resignation of Mr. Gofton ?

THE LATE LADY M'FADYEAN.

The PRESIDENT : Not, I think, at this meeting. There is a matter to which I should refer now, and that is the lamented death of Lady M'Fadyean. Lady M'Fadyean was, in every sense of the term, a daughter of the profession

in her younger days. The history of the profession during this period, when it comes to be written by those of the future—who alone can assess the real value of the things of the past—will be found to be, very largely, the history of the period which centred round the name of her distinguished husband. (Hear, hear.) And I feel that her association with Sir John during such a long period, a period which has been of inestimable value to both, has played no mean part in the influence that he himself had on the history of our small profession.

I move, formally, at this annual meeting of the profes sion as a whole, that we place on record our sense of the sad loss that we have sustained, and our profound sympathy with her distinguished husband, our renowned leader.

This was carried by members rising in their places.

PRESENTATION OF CERTIFICATES.

The SECRETARY announced that Mr. J. M. McDonald and Mr. J. S. Stevenson, winners of the Fitzwygram Prizes, had not been able to attend.

The PRESIDENT then presented certificates for the Walley Memorial Prize to Mr. N. H. Hole, M.R.C.V.S., and Mr. A. I. Thomas, M.R.C.V.S., who received equal marks in the examination.

The PRESIDENT: That concludes the business of the annual meeting.

In replying to a vote of thanks for his conduct of the business of the meeting, the PRESIDENT said: "I assure you that the occupation of this office has been associated with much delight to me, and I thank you very much."

From The Veterinarian, July, 1828.

Duration of Utero-gestation and of Incubation in several Quadrupeds and Domestic Birds.

Extracted from a Memoir read to the Academie Royale des Sciences at Paris, by M. TESSIER.

In 1,131 cows, the shortest period of gestation was 240 days, and the longest 321 days; difference, 81 days; and, counting from nine months, 51 days.

In 582 mares, which admitted the horse only once, there was, from the shortest gestation (or 287 days) to the longest (419), 132 days; and, reckoning from the 330th day, or eleven months, 89 days.

In 312 mares, which had leaped several times (in dating from the last), from the shortest gestation (that is, 290 days) to 377, the longest, 87 days; and from the 330th, or eleventh month, 47 days of prolongation.

Of two female asses, one carried 380 days, or twelve months and twenty days; the other 391 days, or thirteen months and one day.

In 912 ewes, the difference was from 146 to 157 days; and from the fifth month to extreme period, seven days.

In eight female buffaloes, there was a difference of 27 days between the shortest and longest period; and the latter extended to 338 days, or ten months and 28 days.

Two bitches carried 62 days; one 61, and one 58; which gives, in four animals only, a latitude of four days.

Twenty-five sows littered, from 109 to 133 days.

Between the extremes of gestation of 161 rabbits, there was an interval of eight days; one of these was the 27th day, the other the 35th.

Incubation.—Several turkeys having sat on the eggs of hens, the duration of the sitting was from 17 to 27 days; the same on ducks' eggs, 27 days; the same on turkeys' eggs, from 26 to 29 days.

Hens sat on ducks' eggs, from 26 to 34 days; on those of their own species, from 19 to 24 days.

In ducks, the duration of sitting was from 28 to 32 days. Common geese, from 29 to 33 days. Pigeons, from 17 to 20 days.

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Veterinary Medical Society.

We have much pleasure in stating that at the last meeting of the "Veterinary Medical Society," held at Mr. Youatt's Theatre, on Wednesday, June 24th, no fewer than seventeen members were admitted, consisting of nine respectable practitioners residing in the metropolis and its environs, and eight from distant parts of the country; and who were anxious to be enrolled among those who, free from party spirit, were honestly devoted to the pursuit of truth and the improvement of the veterinary art.

The Society will meet on every Wednesday evening during July, at eight o'clock, precisely, for the admission of members, and the discussion of questions connected with veterinary practice, and will then be adjourned until the first Wednesday in October.

Communications may be addressed to the Secretary, at the Theatre, Nassau Street, Middlesex Hospital.

CLINICAL AND CASE REPORTS.

Abortion in Bitches.

By W. A. CAMPBELL, M.R.C.V.S., Boroughbridge.

Like Mr. J. V. S. Rutter, who referred to this subject in the correspondence columns of your issue of June 8th, I would welcome some advice concerning it, also on excessive puppy mortality.

Some months ago Prof. Williams and Mr. Smythe wrote very interesting articles to your paper respecting gastro-intestinal catarrh in young puppies, and I think Prof. Williams connected this disease with contagious abortion in the bitch. He also mentioned that one of the first symptoms shown by the bitches was snapping at, and sometimes killing, their puppies when two or three weeks old. I had already noted those symptoms, but had not recognised that I was dealing with the same disease all the time.

In one kennel of West Highland terriers I have had much trouble, and a heavy death rate amongst puppies. Some two years ago I was asked to look at a bitch that had started snapping at her puppies. It was not her first litter, and she had always been a good mother up to then. I could find nothing wrong with her or the puppies. Two days later the owner reported that the puppies were going back and losing their bloom. I found them suffering from gastro-intestinal catarrh, and within a few days all four were dead. A week or so later another bitch was reported to be forsaking her three-weeks-old puppies. The bitch appeared normal, but the puppies were bloated and unthrifty looking. One or two of them showed diarrhœa with mucous and blood amongst the fæces. In spite of all care and treatment the whole litter died. About the same time two strong, well-developed puppies arrived on the premises from a kennel two hundred miles distant. Within two days they were showing signs of the disease, and for several weeks they looked like dying and were reduced to skeletons, but eventually did recover. One of them since has won championships at the leading shows.

XUM

The next trouble in these kennels was that out of eight bitches mated only two were pregnant. Out of the six barren bitches, four were all right after the third mating, but produced very small litters. One had one puppy, two had two each, and one had three. Very few of those puppies were reared.

This spring the litters are good, averaging about five. There has been little or no trouble at whelping, and the puppies grow and do well up to three or four weeks, then practically every puppy begins to show bowel trouble, and their skins get into a terrible state. In many cases the mothers show the same symptoms. A fine, healthy small collie foster-mother developed the disease within a month, and all the four puppies she suckled are dead. One veterinary surgeon consulted on the matter suggested mange as the skin trouble, another suggested gastric distemper, but I cannot agree with them, as there are some sixty dogs of varying ages on the premises, and not one has ever shown symptoms of those diseases over four months old.

The kennels are ideal, situated in a field in the country. There are plenty of isolation kennels. No expense is spared in feeding or treatment. Goats are kept to supply milk, although there is plenty of cow's milk available.

The disease appears to me to be less deadly than it was two years ago. The puppies are perhaps older before the disease strikes them. At the present moment there are about a dozen strong, well-grown dogs varying from six to ten weeks old. all ruined by their skins. Both internal and external treatment is being persevered with. Immediately the puppies are weaned the mothers seem to clear up quickly with treatment..

I should like to know if snapping at puppies, the barrenness, the small litters, the gastro-intestinal catarrh and the skin trouble are all symptoms of one and the same disease.

Removal of the Nasal Septum from a Cow.*

By HAROLD L. MCCRILLIS.

December 20th, 1928, a Holstein cow, aged ten months, was brought into the College hospital. She had an inspiratory and expiratory dyspnœa accompanied by a foamy exudate from the nostrils and slightly accelerated breathing. The pulse and temperature were normal. The owners said the condition had been present about three weeks and was growing worse.

An examination of the respiratory tract revealed that the nostrils were partly occluded by a thickening of the nasal septum. Palpation of the septum caused a great amount of pain. The rest of the respiratory tract was normal.

The animal was placed on the operating table and the nasal septum was removed. The technique was the same as in a similar operation for the horse.

An area was shaved and disinfected with tincture of iodine, over the nasal septum just in front of the anterior extremity of the frontal sinuses. A trephine opening was made at this point and the septum grasped with a pair of compression forceps. The septum was severed by making a vertical incision just in front of the compression forceps with a guarded chisel. The anterior extremity of the septum was severed by making an incision with a scalpel from the dorsal to the ventral edges just posterior to the alar cartilages. The dorsal and ventral edges of the septum were severed between the anterior and posterior incisions with a guarded chisel, and the septum was removed through the nostril.

Relief from the dyspnœa was instantaneous upon removing the animal from the table. She went home in about a week breathing normally. The latest report about six weeks later was that the animal was in good health and had had no further trouble. This is the first case on record at Iowa State College of such an operation on a cow, and so far as we know no other cases have been reported elsewhere.

* *Veterinary Medicine*, June, 1929, No. 6, Vol. XXIV.

ABSTRACTS.

[Communication on the Implantation of a Portion of Ovary into a Cryptorchid. PARDUBSKY, K. (1927), *Prag. Arch. f. Tiermed. uh. vgh. Path*, 7, p. 171-173.]

A very troublesome, unruly, abdominal crytorchid had implanted in the musculature subcutis of the breast region a number of bean-sized portions of a mare's ovary. Seventy days later the animal was much quieter and 216 days later it allowed itself to be groomed and harnessed.

[Investigations on the Eyes of Horses. FLEMMING (1928), *Ztschr. f. Vet.-Kde.*, 40, 6, 229-235.]

A description of the apparatus and method of its use is given. The investigation was conducted on troop (army) horses.

Of 828 horses, varying in age from 4-19 years, 1 per cent. had hypermetropia, 25 per cent. myopia, the remainder being emmetropic. The age of the animal appeared to have no significant effect. Astigmatism was present in 5 per cent. of horses, but only the pronounced cases were recorded. Complete corneal opacity was seen in 1 per cent. and partial opacity in the form of spots or streaks in 6 per cent. of animals. The latter defect was usually the result of wounds. In two horses there was keratitis punctata. Pigmentary defects of the retina were present in 8.4 per cent.

Cloudiness of the vitreous humour seen in 9·7 per cent. of horses, half being in one and half being in both eyes. Usually this was of a fine, dust-like nature. Other disease changes were, as a rule, lacking in such eyes, except usually myopia. Whilst the few severe cases in this class were referable to periodic inflammatory processes, the majority were hereditary or due to disturbances of nutrition.

Cataract was observed in 25 per cent. of horses ; of these cases, 31 are to be reckoned as hereditary. Of the remainder periodic inflammation and nutritional disturbances must be accounted causes. The so-called "Y" cataract is not included in the list, as it was seen in most horses.

Subluxation of the lens was seen twice in 828 horses ; luxation of the posterior chamber once and of the anterior once.

Atrophy of the optic nerve with blindness was seen twice.

Medullated nerve fibres were seen eleven times, but sight was not interfered with.

A persistent membrane of the art. hyaloidea was seen twice.

Detachment of the retina was present in the blind eye of one horse.

Hypertrophy of the corpora nigra was seen twice.

A 5 mm. long, 2 mm. broad, coloboma of the iris was observed once. In another case the pupil was permanently closed through growth of the iris. "Iris-rests" on the lens were seen three times, and posterior synechia observed five times.

To see whether eye defects caused "shying" in horses, the investigation results of 39 "shyers" were collected.

No changes	11	Lens cloudiness ...	2
One-sided blindness	4	Cataract	2
Astigmatism ...	4	Corneal opacity ...	2
Myopia	9	Lens opacity (medium)	1
Medullated nerve fibres ...	1		

As the causes of shying, only cases of one-sided blindness, astigmatism and high grade myopia must be noted; the remaining changes are only chance findings. The chief cause of shying is natural timidity and irritability.

[Contribution to the Knowledge of Melanosarcomatosis in Pigmented Horses. MOLLMANN, L. H. (1928), *Ztschr. f. Vet.-Kde.*, 40, 9 338-48.]

Most communications on melanotic tumours have been in connection with white horses. The author was able to find only twelve contributions in literature of their presence in coloured animals.

Of these cases, ten horses were brown, one chestnut and one black. The sexes were nine geldings and two mares, and one not recorded. The ages were seven of 13 years and over, two of 9 years and one each of 6 and 8 years. The predilection site corresponds as a rule to those in white horses (tail—5, shoulder region—1, masseter region—1). In two cases—mediastinal lymph glands, once in cæcum, once in abdomen, and in the last case there was no indication as to original site. Metastases were nearly always observed.

The author gives details of a case investigated by himself. Brown gelding, 9 years old. The horse was operated on for a melano-sarcoma of the tail. Unable to rise after the operation, so was killed. *Post-mortem* showed a fractured dorsal vertebra. The region of the fracture was the site of a melano-sarcoma metastasis. The tumour at the tail had invaded the os sacrum. The tail tumour, the left lung, the liver and a number of dorsal vetebræ were examined.

The tail tumour, on section, consisted partly of a whitish-grey to sooty-grey fat-like tissue, and partly of a deep black tissue in which were intermixed greyish white "threads." The tail musculature was shrunken. In the lung thirty-one nodes, pea- to walnut-sized, were seen.

The seventh dorsal vertebra was involved in melanotic deposit.

There were also deposits of brownish-black colour in the remaining vertebræ.

A pigeon-egg-sized black tumour was found in the liver. Histologically, the tumour showed a net-like stroma, with tumour parenchyma lying within the meshes. The stroma consisted of long, spindle cells and contained collagen threads. Between the collagen threads, chiefly in rows, were cells full of black-brown pigment. Within the stroma mesh were round cell masses, composed of unpigmented or very slightly pigmented cells. The cells themselves were round to oval, with plenty of protoplasm and a large roundish neucleus, containing a moderate amount of protoplasm and of varying size. One or two nucleoli were usually present. By silver nitrate treatment black spots were demonstrable in the pigment-free cells. It was shown that the pigment present in the tumour was melanin.

Finally, melanosarcomas in the horse are relatively harmless when growing in such regions as the tail, but when they spread to such regions as the abdomen, they have the properties of malignant tumours.

DIVISIONAL REPORT.

Lancashire Division, N.V.M.A.*

MEETING AT LIVERPOOL UNIVERSITY.

A general meeting of this Division was held at Liverpool University, on Wednesday, March 6th, 1929.

Prior to the meeting the members took advantage of Professor Gaiger's invitation to inspect the new premises of the department of Veterinary Pathology of the University. The department is housed in the buildings formerly occupied by the departments of Metallurgy and Civil Engineering. There are in all some thirteen rooms, consisting of lecture room, large practical laboratory, three private laboratories, offices and library, sterilising room, media room, a laboratory for advanced students, a histopathological laboratory, microphotography room, store room, etc. Behind the building is a commodious and well-fitted *post-mortem* house, in addition to loose boxes for experimental and demonstration animals, and small experimental animals. The large practical laboratory can accommodate from fifteen to twenty students for practical instruction, and is intended not only for the use of undergraduate and advanced students but for post-graduate instruction as well. The department can provide accommodation for any visiting scientist from other laboratories or from abroad, who wishes to carry out research into any special subject. The benches and tables throughout the building are fitted with electric light, power, gas, and hot and cold water, providing excellent facilities for pathological and bacteriological work. It is anticipated that the department will become a centre not only for the instruction of undergraduates, but also of post-graduates, and be a useful asset to the profession in the routine examination of material for veterinary practitioners as well as in the carrying out of investigations into animal diseases. The department is now in a position to undertake routine work for veterinary surgeons, and a considerable amount of such work has already been done.

The staff consists, in addition to Professor Gaiger, of Mr. Downham, the advisor in Veterinary Science for the University area; Mr. Davies, lecturer in Veterinary Pathology; three laboratory assistants and a secretary and librarian.

* Received on 6th May, 1929.

The meeting was held in the Surgical Theatre of the Medical School at 2-30 p.m. The President, Mr. H. H. Aldred, occupied the Chair, others present being Lt.-Col. J. W. Brittlebank, Messrs. E. L. Butters, E. J. Burndred, W. L. Cockburn, K. D. Downham, F. G. Edwards, Prof. S. H. Gaiger, Messrs. J. Holroyd, A. H. Leyland, P. T. Lindsay, Major A. B. Mattinson, Messrs. H. T. Matthews, G. Mayall, T. G. Millington, C. A. McGaughey, A. W. Noel Pillers, J. O. Powley, A. C. Shuttleworth, J. Spruell, H. L. Torrance, W. Tweed, J. H. White, and W. Woods. Visitors present were Messrs. W. A. Castle, D. E. Davies, G. O. Davies, R. Dudlyke, R. Hopps, E. D. Jenkins, J. C. Marginson, Miss E. W. Marshall, Messrs. R. F. Montgomerie, E. Prescott, N. B. Sidhorn, and W. Lyle Stewart.

The minutes of the last meeting were taken as read.

Correspondence. (1) Apologies for unavoidable absence from Messrs. W. G. Burndred, E. H. Curbishley, J. H. Carter, H. Holroyd, R. Hughes, Prof. J. Share-Jones, and Major J. H. Wright. (2) From the N.V.M.A., requesting the opinion of the members on the proposed alteration of Article 59 of the Articles of Association of the Association, whereby twenty-five additional members of the Council of the "National," previously nominated, may be elected by ballot prior to the Annual General Meeting.

Mr. HOLROYD, after reiterating the full sequence of facts which led to the proposed addition and the effect the proposal, if adopted, would have on the constitution of the Council of the N.V.M.A., proposed the following resolution:—"That in the opinion of the members of this Division there should be no interference with the present method of election of members of the Council of the National Veterinary Medical Association."

Col. BRITTLEBANK seconded the resolution, and it was carried.

(3) From the "National" on a scheme for the free treatment of sick animals of the poor. The Secretary also read a report of a meeting of the special committee on this subject, and the following resolution forwarded to him by Prof. Share-Jones:—"That this meeting of the Lancashire and District veterinary practitioners welcomes the effort of the Council of the Royal College of Veterinary Surgeons to provide generally a system for the free treatment of animals of those unable to pay: that it assures the Council of its cordial support, and reposes full confidence in the Council to secure any system which may be evolved against abuse, and to safeguard the prescriptive rights and privileges of qualified veterinary surgeons."

Mr. HOLROYD said he did not know if they ought to go into the details of the scheme at the present juncture; he thought that what was wanted was more a general acceptance of the principle. The details could be gone into later.

The resolution was put to the meeting and was carried, on the proposition of Mr. MATTHEWS, seconded by Mr. BUTTERS.

ELECTION OF OFFICE-BEARERS AND COUNCIL.

President. The next business was the election of office-bearers and Council for the ensuing year, and the President proposed that his successor in the chair be Major W. G. Burndred.

Mr. HOLROYD seconded, and the resolution was carried with acclamation.

Vice-Presidents. Messrs. H. H. Aldred, E. L. Butters, and P. T. Lindsay.

Hon. Treasurer. Mr. A. W. Noel Pillers.

Hon. Secretary. Mr. J. Spruell.

Hon. Auditors. Messrs. T. Dobie and H. L. Torrance.

Council. Messrs. J. W. Brittlebank, E. H. Curbishley, F. G. Edwards, S. H. Gaiger, J. Holroyd, F. Hopkin, G. H. Locke, T. Wilson, W. Woods, and J. H. Wright.

Representatives on the Council of the National V.M.A. Messrs. J. W. Brittlebank, J. H. Carter, S. H. Gaiger, and J. Spruell.

Annual Meeting and Dinner. Mr. WOODS proposed, Mr. HOLROYD seconded, and it was carried, that the Annual Meeting and Dinner be held in Manchester, and that ten guineas be voted from the funds of the Division towards the expenses of the President for the entertainment of the guests.

The PRESIDENT then called upon Prof. S. H. Gaiger to give a lecture on "My Visit to the Argentine," with illustrations by the epidiascope.

[This lecture is reproduced earlier in this issue of the *Record*.—Ed.].

At its conclusion, the PRESIDENT said they had listened to a very interesting lecture, although he thought they had rather cramped Professor Gaiger by the time their previous business had occupied. He would be pleased if somebody would propose a vote of thanks to the Professor.

Mr. WOODS responded, and in moving the compliment, described the paper —(amid applause)—as one of the most interesting to which he had ever listened. When Professor Gaiger said there was no frozen meat landed in this country, he took it that the Professor meant none from the Argentine.

Professor GAIGER: Yes, comparatively none.

Mr. WOODS remarked that he supposed most of the frozen meat landed in this country was brought from Australia.

Professor GAIGER said it was true to say that chilled beef came to this country entirely from the Argentine. The question as to whether meat was chilled or frozen depended upon the distance it had to come. Chilled meat could not be sent from Australia. All the meat brought to the United Kingdom from Australia was frozen, because, if meat were kept at a chilled temperature for more than a certain time, it automatically became frozen. What he had intended to say was that the Argentine was dependent upon England for the whole of its chilled beef industry. There was also a frozen meat industry in the Argentine, and some of it came to this country, but most of it went to the Continent.

Mr. WOODS added that he understood that foot-and-mouth disease was very prevalent in the Argentine; in fact, an inspector who had been in the Argentine had told him that during the time he was there he had condemned about 16,000 carcases.

Professor GAIGER replied that of course that was not a very big number considering the thousands and thousands of carcases that were dealt with in the Argentine.

Mr. WOODS said he did not think the inspector was exaggerating.

The PRESIDENT seconded the vote of thanks, which was carried with loud applause.

Professor GAIGER briefly replied, and the proceedings terminated.

JOHN SPRUELL, *Hon. Secretary.*

NOTES AND NEWS.

The Editor will be glad to receive items of professional interest for inclusion in these columns.

Diary of Events.

Aug. 31st to Sept. 6th.—N.V.M.A. Congress at Ayr.

June 24th.—Meetings of the Finance Committee, N.V.M.A., 3-30 p.m.; Editorial Committee, 4-30 p.m., both at 10 Gray's Inn Square.

„ 27th—Meeting of the Lancashire Division, N.V.M.A., at Aytoun Street, Manchester, 3 p.m.

„ 27th—Meeting of the Dumfries and Galloway Division, N.V.M.A., at Penrith.

July 3rd.—R.C.V.S. Annual Dinner.

„ 4th—R.C.V.S. Committee Meetings.

„ 5th.—R.C.V.S. Council Meeting.

„ 9th.—R.C.V.S. Written Examinations.

„ 11th.—R.C.V.S. Oral Examinations begin.

Annual Dinner, R.C.V.S.

Readers are reminded that tickets for the Annual Dinner should be purchased from the Secretary of the Royal College not later than Saturday next, June 29th. It is inconvenient to issue tickets at the last moment at the Hotel, and unless timely application is made for tickets it is difficult to arrange the seating accommodation to suit individual requirements. A number of influential guests will be present, and we hope that all members of the College who can possibly manage to be in London on July 3rd, will arrange to be at the Dinner in support of the President. Tickets, 12s. 6d., exclusive of wines.

Royal Veterinary College Rebuilding Fund.

All members of the profession in London and the Home Counties are asked to support the Garden Fête and Bazaar in aid of the above Fund, which is to be held on Saturday, July 6th, in the grounds of "Coombe Brook," Coombe Lane, Kingston Hill (by kind permission of Captain and Mrs. Claude Ewin). Principal Hobday will perform the opening ceremony at 3-0 o'clock, and the programme includes sports, and dancing on the lawn from 7 to 10 p.m. The Band of the 6th East Surrey Regt. (T.F.) will be in attendance. Light refreshments will be obtainable. The admission charge is one shilling. Book to Norbiton Station, or take ' bus No. 113.

R.A.C.V. Annual Dinner.

The following is a list of officers who attended the above Dinner on Friday, the 14th June, 1929, at the Hotel Cecil :—

Major-General H. T. Sawyer, C.B., D.S.O., Presiding, Director-General, Army Veterinary Services.

Major-Generals.—Sir Layton J. Blenkinsop, K.C.B., D.S.O. (Colonel Commandant), Sir John Moore, K.C.M.G., C.B., F.R.C.V.S., and W. Dunlop Smith, C.B., C.M.G., D.S.O.

Colonels.—J. J. Aitken, C.M.G., D.S.O., O.B.E., W. S. Anthony, C.M.G., W. A. Pallin, C.B.E., D.S.O., F.R.C.V.S., A. Smith, A. G. Todd, C.B.E., D.S.O., and G. K. Walker, C.I.E., O.B.E.

Lieutenant-Colonels.—E. P. Argyle, D.S.O., A. E. Clarke, J. A. Connell, P. W. Dayer-Smith, O.B.E., H. E. Gibbs, D.S.O., J. J. Griffith, D.S.O., B. L. Lake, D.S.O., O.B.E., H. S. Mosley, D.S.O., F. C. Stratton, W. H. Walker, D.S.O., O.B.E. and E. C. Webb, O.B.E., F.R.C.V.S.

Majors.—F. J. Andrews, J. O. Andrews, D.S.O., R. M. Bamford, O.B.E., B. R. Body, J. S. Bowden, O.B.E., A. B. Bowhay, O.B.E., L. Danels, A. C. Duncan, F.R.C.V.S., T. S. Green, J. Harrison, C. W. Heane, T. Hicks, F. Hogg, H. J. Hughes, M.B.E., R. H. Knowles, M. J. Killelea, W. H. Kirk, T. Lishman, W. St. J. F. Macartney, R. W. Mellard, D.S.O., J. J. Mills, C. A. Murray, J. W. O'Kelly, F. C. O'Rorke, C.M.G., F.R.C.V.S., G. E. Oxspring, A. A. Pryer, D.S.O., G. C. B. Rees-Mogg, O.B.E., W. M. Rouse, C. G. Saunders, D.S.O., J. Smith, R. T. Smith, G. F. Stevenson, H. Stephenson, M.C., W. H. Thomas, G. E. Tillyard, O.B.E. and T. E. Campey, M.B.E.

Captains.—J. T. Edwards, E. S. O'Kelly, L. R. Swift and G. S. Walker.

Lieutenant.—A. J. Warburton.

Will the member who forwarded to the office, without any evidence of his identity, two postal orders (postmarked Largs, Ayrshire), in payment of his subscription, kindly communicate with the General Secretary?

CORRESPONDENCE.

Letters to the Editor should reach the Office not later than by the first post on Tuesday morning for insertion in following Saturday's issue.

All correspondence must bear the name and address of the contributor for publication.

The Editor does not hold himself responsible for the opinions of his correspondents.

An Ancient Prescription in Modern Practice.

To the Editor of the Veterinary Record.

Sir,—Extracts which are published weekly from *The Veterinarian* of one hundred years ago, are of immense interest and in many instances of no little value.

In your issue of June 8th appears an extract from *The Veterinarian* of June, 1828, describing an affection of lambs. The Editor of that period chose to add an editorial note by way of explanation and help to the contributor, concluding with a formula which he recommended for lambs suffering from diarrhœa. The formula was as follows :—

Prepared chalk ...	one pound.
Powdered catechu	half a pound.
Prepared ginger ...	quarter of a pound.
Laudanum and Peppermint water	one pint.

I was particularly interested to see that this formula had appeared as long ago as 1828, for I had found a similar one of great value to me up to as recently as six years ago when treating lambs and calves for excessive diarrhœa. The prescription of which I made use is as follows :—

R	P. cretæ prep.	℥ 2.
	P. catechu	℥ 1.
	P. zinzib.	℥ 4.
	P. opii	℥ 1.
	Aqua menth. pip.	℥ 1.

Of this mixture I was in the habit of recommending one to two tablespoonsful twice daily to lambs and double to calves. It was so successful that many farmers kept a stock by them. I obtained the prescription from an exceedingly valuable, albeit somewhat archaic, volume called "A Manual of Pharmacy" by W. T. J. Morton. This was published in 1860 by Longman, Green, Longman and Roberts, aud even now can be seen on occasions on the stalls of second-hand booksellers.

One of the most able practitioners of his day, and at the same time a keen and knowledgeable pharmacist, the late George William Cowell, F.R.C.V.S., from whom I received many useful hints, told me that at that time (about 1899) he considered there were few books dealing with cattle pharmacy which equalled in value "Morton's." His enthusiasm for this useful little handbook may have been due to an intense regard for an old teacher, for Morton was Professor of Chemistry and Pharmacy at the Royal Veterinary College, Camden Town, where George Cowell studied.—I am, yours faithfully, George W. Dunkin.

National Institute for Medical Research,
Farm Laboratories, Mill Hill, N.W.7.
June 11th, 1929.

XUM

The Nature and Origin of Fistulous Withers.

To the Editor of the Veterinary Record.

Sir,—I hope you will grant me permission to reply to Mr. Scott's letter appearing in the issue of the *Veterinary Record* of June 15th. His observations certainly bear out the point I wished to make in my original letter, *viz.*, that some of the bacteria found in fistulous withers were probably accidental invaders. He wanders from the point, however, and gratuitously gives the "correct" method of treatment, which is admirable in theory, but in my opinion in many cases would simply be a waste of time, as my endeavour is to lose as few working days as possible, with a minimum of expense to the owner, as agriculturalists are having rather a lean time. Mr. Scott's remarks make me wonder how he would treat some of the big serous abscesses in cattle and horses, as the result of violence. Yours truly, T. G. Heatley.

Woodbridge, Suffolk,
June 15th, 1929.

Treatment of "Lambing Sickness."

To the Editor of the Veterinary Record.

Sir,—Referring to Professor Russell Greig's article on "Lambing Sickness" in the issue of the *Veterinary Record* of June 15th, may I point out a practical issue in that the ewe mentioned which was treated successfully by a subcutaneous injection of calcium gluconate, had not lambed, and that these cases, before lambing, have responded only very rarely to "inflation."

Yours faithfully, Oscar Stinson.

Appleby,
June 15th, 1929.

R.C.V.S. Council Election.*

To the Editor of the Veterinary Record.

Sir,—I desire to express my sincere thanks to those Fellows and Members of the profession who gave me their vote at the recent elections to Council of the Royal College of Veterinary Surgeons. I am indeed greatly honoured and shall use every endeavour to assist my colleagues of the future in their work for the profession and its advancement.—Yours faithfully, George W. Dunkin.

National Institute for Medical Research,
Farm Laboratories, Mill Hill, N.W.7.

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To the Editor of the Veterinary Record.

Dear Sir,—Kindly permit me, through your columns, to thank my numerous supporters, in the recent Council election, for their votes and many kind letters. It has, so far, been impossible to answer these individually, but I would like to intimate that the various interesting points which have been raised in two or three of the letters, have been carefully considered and placed before the proper authorities.

Although unsuccessful in gaining a seat on the Council R.C.V.S. at this first attempt, I am by no means disheartened, but look forward with increased confidence to the next election.

Yours faithfully, Hamilton Kirk.

"Croyland,"
938 Finchley Road,
Golder's Green, N.W.11.

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To the Editor of the Veterinary Record.

Dear Sir,—Will you kindly grant me a small space in your columns to express my thanks to those Fellows and members of the profession who supported me at the recent election to Council. It will be my endeavour to merit the confidence they have placed in me.

"Shirley," Yours faithfully, P. J. Simpson.
Castle Hill,
Maidenhead.

*** The foregoing communications under above heading were received just too late to admit of their inclusion in our issue of last week.**

To Fellows and Members of the Royal College of Veterinary Surgeons.

Dear Confrères.—To all who honoured me with their votes at the election of members of Council I tender my very sincere thanks. It would no doubt be observed that in the list of attendances I had been absent on several occasions; that was due to my being, at the kind invitations of the Australian and New Zealand Governments, abroad for nearly nine months. However, I hope that my conversations with our members overseas did more good than if I had been at Red Lion Square, by informing them of what the College is trying to do for the profession, by assuring them that, though far away, they are not forgotten and that we are always willing to assist them when possible. I take this opportunity to assure you that our confrères overseas have still warm hearts for their *Alma Mater*; they watch our doings very carefully. They were exceedingly kind to me and all sent their kindest regards to friends in the dear Homeland.

I have just returned from a tour in Switzerland, Germany and Holland, where I met many veterinary surgeons, who promised to come to the International Congress in London in 1930. I assured them of a hearty welcome and was asked to convey to the profession in Britain the kind regards of their confrères on the Continent.

I have taken, and will continue to take, much interest in new legislation affecting our profession, especially with reference to public health work, in which so many of our members are now obtaining positions. Those will continue to increase, and it is important that our young men should make themselves as highly qualified—socially, scientifically, and practically—as possible, in order to fill with credit those responsible offices. If my experience and advice are of any use to young members, I want to assure them they need not hesitate to write to me, as I shall always be at their service. The high standard of meat inspection in Smithfield has had far-reaching effects during the last twenty years; for example, it has increased the numbers of veterinary officers associated with meat inspection in Argentina, Uruguay and Brazil by over 100, caused the establishment of an entirely new veterinary meat inspection service in Chile, has been the cause of establishing a Federal Veterinary System of Meat Inspection in one Dominion, and increased the veterinary staff in another, and has materially assisted in causing another country to draft a meat inspection Act of Parliament, which will give veterinary officers control of all meat intended for export to Britain. Thus, by quiet, diplomatic work more good can be done for our profession than by public agitation, which so often only makes enemies.

I would have published the greater part of this letter prior to the elections, but refrained from doing so as it might have been taken as canvassing for votes, which, in my opinion, should be discouraged; every member should be free to vote for the good of the profession only and not swayed by any personal feelings. In conversation with many members of the profession, I find there is a considerable consensus of opinion that country practitioners are not sufficiently represented on the Council. I would like to see this subject discussed in the *Record*. Assuring all members of my earnest desire to be of service to them.

Yours faithfully, T. D. Young.

"Sussex House," Howard Road,
South Norwood, London, S.E.25.

The Editor acknowledges the receipt of the following:—

Reports of meetings of the Midland Counties and West of Scotland Divisions, N.V.M.A., from Mr. H. J. Dawes and Dr. A. W. Whitehouse, respective Hon. Secretaries; and of the V.M.A. of Ireland, from Prof. J. J. O'Connor, Hon. Secretary.

Communications from Major H. Allen (Mona, Punjab), Mr. K. D. Downham (Liverpool University), Mr. Dudley A. Gill (Wallaceville, New Zealand), Mr. J. Howard Jones (Bridgend), Major J. Mullany (Secunderabad, India), and Mr. E. Wilkinson (Witney).